Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY PATENT APPLICATION **TRANSMITTAL** 

Attorney Docket No. 146712002020 Chung-Hee CHANG First Inventor MAGNETIC ANISOTROPY OF SOFT-Title UNDERLAYER INDUCED BY SEEDLAYER

| (Only for new nonprovisional applications under 37 CFR 1.53(b))  | ess Mail Label No.   |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |
| APPLICATION ELEMENTS See MPEP chapter 600 concerning utility patent application contents.  | MS Patent Application  ADDRESS TO: Commissioner for Patents P.O. Box 1450  Alexandria, VA 22313-1450   |  |  |  |  |  |  |  |
| X Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original, and a duplicate for fee processing)  Applicant claims small entity status. See 37 CFR 1.27.  X Specification [Total Pages 25]  (preferred arrangement set forth below)     Descriptive title of the invention     Cross Reference to Related Applications     Statement Regarding Fed sponsored R & D     Reference to sequence listing, a table,                | 7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)  8. Nucleotide and/or Amino Acid Sequence Submission (il applicable, all necessary)  a. Computer Readable Form (CRF)  b. Specification Sequence Listing on:  i. CD-ROM or CD-R (2 copies); or ii. Paper  c. Statements verifying identity of above copies |  |  |  |  |  |  |  |
| or a computer program listing appendix - Background of the Invention   | ACCOMPANYING APPLICATION PARTS   |  |  |  |  |  |  |  |
| Brief Summary of the Invention     Brief Description of the Drawings (if filed)     Detailed Description     Claim(s)     Abstract of the Disclosure   | 9. Assignment Papers (cover sheet & document(s))  10. 37 CFR 3.73(b) Statement Power of Attorney   |  |  |  |  |  |  |  |
| 4. X Drawing(s) (35 U.S.C. 113) [Total Sheets 7]   | 11. English Translation Document (if applicable)   |  |  |  |  |  |  |  |
| 5. Oath or Declaration [Total Sheets ]   | 12. Information Disclosure Copies of IDS Statement (IDS)/PTO-1449 Citations  |  |  |  |  |  |  |  |
| a. Newly executed (original or copy)   | 13. Preliminary Amendment  |  |  |  |  |  |  |  |
| b. Copy from a prior application (37 CFR 1.63(d)) (tor continuation/divisional with Box 18 completed)  | 14. Return Receipt Postcard (MPEP 503) (Should be specifically itemized)   |  |  |  |  |  |  |  |
| : DELETION OF INVENTOR(S) 15. Certified Copy of Priority Document(s)   |  |  |  |  |  |  |  |  |
| Signed statement attached deleting inventor(s)   |  |  |  |  |  |  |  |  |
| see 37 CFR 1.63(d)(2) and 1.33(b).   | 16. Applicant must attach form PTO/SB/35 or its equivalent.  |  |  |  |  |  |  |  |
| 6. X Application Data Sheet. See 37 CFR 1.76   | 17. Other:   |  |  |  |  |  |  |  |
| 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the  |  |  |  |  |  |  |  |  |
| specification following the title, or in an Application Data Sheet under 37 CFR 1.76:  |  |  |  |  |  |  |  |  |
| Continuation Divisional X Continuation-in-part   | X Continuation-in-part (CIP) of prior application No.: 09/873,314  |  |  |  |  |  |  |  |
| Prior application information: Examiner Holly C. Ric   | kman Art Unit: 1773  |  |  |  |  |  |  |  |
| For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. |  |  |  |  |  |  |  |  |
| 19. CORRESPONDENCE ADDRESS   |  |  |  |  |  |  |  |  |
| x Customer Number: 25227   | OR Correspondence address below  |  |  |  |  |  |  |  |
| Name   |  |  |  |  |  |  |  |  |
| Address  |  |  |  |  |  |  |  |  |
| City State   | Zip Code   |  |  |  |  |  |  |  |
| Country Telephone  | Fax  |  |  |  |  |  |  |  |
| Name (Print/Type) Raj S Davé   | Registration No. (Attorney/Agent) 42,465   |  |  |  |  |  |  |  |
| Signature Q  | Date December 8, 2003  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| - t ·  |  |  |  |  |  |  |  |  |

PTO/SB/17 (10-03)
Approved for use through 7/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

| FEE TRANSMITTAL Application  |  |                            |                                      |               | Compl te if Known  |  |                                   |  |  |  |
|--|--|----------------------------|--------------------------------------|---------------|--|--|-----------------------------------|--|--|--|
| for FY 2004  |  |                            | Application Number CIP OF 09/873,314 |               |  |  |                                   |  |  |  |
|  |  |                            | Filing Date                          |               |  |  | Dec mber 8, 2003                  |  |  |  |
| Effective 10/01/2003, Patent fees are subject to annual revision.  |  |                            | First Named Inventor                 |               |  | Chung-He CHANG   |                                   |  |  |  |
| Encours to the theory, I dean loss als subject to annual levision.   |  | — Examiner Name            |                                      |               | Not Yet Assigned   |  |                                   |  |  |  |
| Applicant claims small entity status. See 37 CFR 1.27  |  |                            | Art Unit                             |               |  |  | Not Yet Assigned                  |  |  |  |
| TOTAL AMOUNT OF PAYMENT (\$) 806.00  |  |                            | 7 11 51 11                           |               |  |  | 46712002020                       |  |  |  |
| METHOD OF PAYMENT (check all that apply)   | FEE CALCULATION (continued)                              |                            |                                      |               |  |  |                                   |  |  |  |
| Credit Money   |  |                            |                                      |               |  |  |                                   |  |  |  |
| Check Card Order Other None  | 3. ADDITIONAL FEES                                       |                            |                                      |               |  |  |                                   |  |  |  |
| X Deposit Account:   |  |                            |                                      |               |  |  |                                   |  |  |  |
| Deposit<br>Account 03-1952   | Large<br>Fee   | e Entity<br>Fee            | Small                                | Entity<br>Fee | -  |  |                                   |  |  |  |
| Number US-1952   | Code   |                            | Code                                 | (\$)          |  | Fee Des  | cription                          | Fee Paid   |  |  |
| Deposit Account Morrison & Foerster LLP  | 1051   | 1051 130 2051 65 Surcharge |                                      |               |  | - late filing fe   | ee or oath                        |  |  |  |
| Name The Director is authorized to: (check all that apply)   | 1052   | 50                         | 2052                                 | 25            | Surcharge sheet.   | e - late provisional filing fee or cover                               |                                   |  |  |  |
| X Charge fee(s) indicated below X Credit any overpayments  | 1053   | 130                        | 1053                                 | 130           |  | sh specificatio  | n                                 | <del>                                     </del> |  |  |
| Charge any additional fee(s) or any underpayment of fee(s)   | 1812   | g                          |                                      |               |  | •  | quest for ex parte reexamination  |  |  |  |
|  | 1804   | 920°                       | 1804                                 | 920*          | Requesting   | g publication (  |                                   |  |  |  |
| Charge lee(s) indicated below, except for the filing fee   |  |                            | 1805                                 | 1,840*        | Examiner :   | g publication (  | of SIR after                      |  |  |  |
| FEE CALCULATION  | 1251   | Examiner a                 |                                      |               | Examiner   | action   | ction or reply within first month |  |  |  |
| 1. BASIC FILING FEE  | 1252   | 420                        | 2252                                 | 210           | Extension  | for reply within   | n second month                    |  |  |  |
| Large Entity Small Entity  | 1253   | 950                        | 2253                                 | 475           | Extension  | for reply within   | n third month                     |  |  |  |
| Fee Fee Fee Fee Fee Description Fee Paid  Code (\$) Code (\$)  | 1254   | 1,480                      | 2254                                 | 740           | Extension  | for reply withi  | n fourth month                    |  |  |  |
| 1001 770 2001 385 Utility filing fee 770.00  | 1255   | 2,010                      | 2255                                 | 1,005         | Extension  | for reply within   | n fifth month                     |  |  |  |
| 1002 340 2002 170 Design filing fee  | 1401   | 330                        | 2401                                 | 165           | Notice of Appeal   |  |                                   |  |  |  |
| 1003 530 2003 265 Plant filing fee   | 1402   | 330                        | 2402                                 | 165           | Filing a brief in support of an appeal   |  |                                   |  |  |  |
| 1004 770 2004 385 Reissue filing fee<br>1005 160 2005 80 Provisional filing fee  | 1403   | 290                        | 2403                                 |               | Request for oral hearing   |  |                                   |  |  |  |
|  | 1451<br>1452   | 1,510<br>110               | 1451<br>2452                         | 1,510<br>55   | Petition to institute a public use proceeding Petition to revive – unavoidable |  |                                   |  |  |  |
| SUBTOTAL (1) (\$) 770.00   | 1453   | 1,330                      | 2453                                 | 665           |  | revive - uninte  |                                   |  |  |  |
| 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE  | 1501   | ,                          |                                      |               |  |  | fee (or reissue)                  |  |  |  |
| Extra Fee from Claims below Fee Paid   | 1502   | 480                        | 2502                                 | 240           | Design iss   | · · · · · · · · · · · · · · · · · · ·                                  |                                   |  |  |  |
| Total Claims 22 -20** = 2 x 18.00 = 36.00  | 1503   | 640                        | 2503                                 | 320           | Plant issue  |  | •                                 |  |  |  |
| Independent 3 -3** = x = 0.00  | 1460   | 130                        | 1460                                 | 130           | Petitions to   | the Commis   | sioner                            |  |  |  |
| Claims U 0.00  | 1807   | 50                         | 1807                                 | 50            | Processing   | fee under 37   | CFR 1.17(q)                       |  |  |  |
| Large Entity   Small Entity  | 1806   | 180                        | 1806                                 | 180           |  |  | on Disclosure Strnt               |  |  |  |
| Fee Fee Fee Code (\$) Fee Description  | 8021   | 40                         | 8021                                 | 40            | Recording each patent assignment per   |  |                                   |  |  |  |
| 1202 18 2202 9 Claims in excess of 20  | 1809   | 770                        | 2800                                 | 305           | F100   | erty (times number of properties) g a submission after final rejection |                                   |  |  |  |
| 1201 86 2201 43 Independent claims in excess of 3  | 1809   | 770                        | 2809                                 | 385           | (37 CFR 1.   | CFR 1.129(a))  |                                   |  |  |  |
| 1203 290 2203 145 Multiple dependent claim, if not paid  | 1810   | 770                        | 2810                                 | 385           |  | each additional invention to be<br>mined (37CFR 1.129(b))              |                                   |  |  |  |
| 1204 86 2204 43 ** Reissue independent claims over original patent   | 1801   | 770                        | 2801                                 | 385           | Request fo   | quest for Continued Examination (RCE)                                  |                                   |  |  |  |
| 1205 18 2205 9 ** Reissue claims in excess of 20   | 1802   | 900                        | 1802                                 | 900           |  | r expedited e:<br>application  | xamination                        |  |  |  |
| and over original patent   | Other fee (specify)                                      |                            |                                      |               |  |  |                                   |  |  |  |
| SUBTOTAL (2) (5) 36.00 "or number previously paid, if greater, For Reissues, see above   | *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 0.00 |                            |                                      |               |  |  |                                   |  |  |  |
|  |  |                            |                                      |               |  |  |                                   |  |  |  |
| Name (Print/Type) Raj S. Davé  |  | ration No                  | 12                                   | 465           |  | (Complete (if applicable)) Telephone (703) 760-7755                    |                                   |  |  |  |
| Signature (V)  | (Atomey/Agent) 42,465                                    |                            |                                      |               |  | <del> </del>   |                                   |  |  |  |
| Joseph Grand Control of Scotland Control of Sc |  |                            |                                      |               |  |  |                                   | 103  |  |  |
| .,   |  |                            |                                      |               |  |  |                                   |  |  |  |